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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,668	11/21/2003	Keon Kim	K-0558	9060
34610	7590	07/12/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			HUSBAND, SARAH E	
			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/717,668

Applicant(s)

KIM ET AL.

Examiner

Sarah E. Husband

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-38 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments, see Remarks, filed 4/20/2006, with respect to the objection to the specification have been fully considered and are persuasive. The objection of the specification has been withdrawn.

Applicant's arguments filed 4/20/2006 have been fully considered but they are not persuasive. Applicants arguments that Lee (US 6167733) does not disclose all the claimed features of the invention are not persuasive because of the following reasons. Applicant argues that Lee does not teach the shaft with a plate disposed in opposition to the passage so as to prevent a particle from passing through the passage. However, this argument is not persuasive because Lee does disclose a shaft with a plate in opposition to the passage. The shaft is not limited to any size or shape and Lee discloses this piece connected to the cap and also a plate extending from the shaft. Further, the passage does not describe one particular area of the filter and because the fluid would be dispersed in every direction, it would have innumerable passages. The centrifugal force provided when the fluid flows into the filter would also be present in certain areas of the fluid. This limitation provides an intended use of the filter and does not provide structure, therefore not distinguishing the claimed invention from the prior art. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. >In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Applicants arguments that Lee does not

disclose the particles being gathered in a central area is also not persuasive because during operation of the filter device, it would be evident that particles would indeed settle in the “central portion” as the plate is depicted in a central portion and particles would be filtered here. Applicant also argues that Lee does not disclose a plate positioned facing the opening in the partition wall, however, the plate would have a portion facing the wall as the wall and opening are found perpendicular to the plate. Therefore, the rejection stands as follows.

***Claim Objections***

Claim 33 is objected to because of the following informalities: “on a on an” in page 10, line 1. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 24 and 31 recite the limitation “the shaft extends continuously in a longitudinal direction of the filter case”. This is unclear because no indication is given in the specification as to the meaning of continuously which seems to have a limitless dimension.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1746

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-15, 18-35 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US Patent No. 6,167,733).

Lee discloses a filter assembly for a drum-type washing machine comprising a filter case (351, which is called a case in which the filter is placed), an inlet and outlet (Fig. 4, Items 348, 356), and a filter having a plate (346) in front of an opening. Lee also discloses a partition wall provided in the tube to partition an internal space of the tube into first and second chambers communicating with the inlet and outlet. The wall is found at the end of the plate in Figure 4 and is shown with an opening as indicated by the white area as compared to the gray lined area. Lee further discloses the inlet and outlets are provided on the outer surface of the tube in the tangent direction (Fig. 4) and an impeller provided in the second chamber (358). Lee also discloses a cap with a handle (344), a shaft attaching the plate to the cap (Fig. 4), the shaft is disposed along a central axis of the filter case, and the filter is built in one body. Lee further discloses the plate is larger than the opening (shown in Fig. 4) and is overlapped with a rim of the opening. Lee also discloses the shaft is continuously extending (Fig. 4) and the fluid flows along an inner circumference of the first chamber.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1746

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 16, 17 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US Patent Office 6,167,733).

Lee discloses the apparatus shown above in the 102(b) rejection. Lee does not specifically disclose the cylindrical shape of the filter case or the openings being circular. However, the shape of the case is mostly cylindrical and it would be obvious to one of ordinary skill in the art to make the entire casing cylindrical or the opening the same shape as the cap shown in Figure 4.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah E. Husband whose telephone number is (571) 272-8387. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SEH

**MICHAEL BARR**  
SUPERVISORY PATENT

**MICHAEL BARR**  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Michael Barr', is written over the printed name and title of the Supervisory Patent Examiner.